## IN THE ABSTRACT

Please substitute the following Abstract for the Abstract presently in the application.

## ABSTRACT OF THE DISCLOSURE

A base station serves as a relay node between a mobile terminal and an application server on a backbone network. The base receives a radio packet from the mobile terminal through a wireless I/F section, and transfers the radio packet to a IP processing section, a TCP input section and a protocol relay section successively in this order. At this point, with respect to the packet, the IP header is processed and then removed in the IP processing section, the TCP header is processed and then removed in a TCP processing section, and the data is transferred to a protocol relay section along with the TCP segment information described in both headers. The protocol relay section has a conversion table, and performs proxy processing based on the table.